

REMARKS

Claims 1-15 are pending.

Claims 1-15 stand rejected.

Claims 1-3, 5-12 and 15 have been amended.

Claims 1-15 are submitted herein for consideration.

No new matter has been added.

Applicants note that claims 1-3, 5-12 and 15 have been amended such that term data has been changed to object, the term local data has been changed to local object and global data has been changed to global object. There is adequate support for this change in the specification as filed. The term object is used throughout the specification to the unit of data being sought.

In paragraph 1 of the Office Action, the Examiner has rejected claims 1-15 under 35 U.S.C. § 103 as being unpatentable over Hayashi (U.S. Patent No. 5873,088).

Applicants respectfully disagree with the Examiner's contentions and submit the following remarks in response.

The present invention, as claimed in claim 1 is directed to an integrated database system, comprised of a plurality of database systems connected to one another by a network, where each of the plurality of database systems manages its own stored data independently of the other database systems and accessing the stored data in accordance with an access request. An integrated database unit connected to the network includes a

directory database which stores, as to each object stored in the plurality of database systems, corresponding information including directory information and a database system in which the object concerned is stored.

A directory control unit is provided which acquires, by using the directory database, directory information corresponding to a target object of an accepted access request. A database identifying unit is also provided which identifies, by using the directory database, the database system corresponding to the target object of the accepted access request.

A database control unit is configured to issue, on the basis of the acquired directory information, an access request to the database system having the target object of the accepted access request, where the database system includes a database server unit which accesses a database in accordance with the access request issued by the integrated database unit.

In this configuration, each of the computers of the present invention, such as computers 111, 121, and 131 from Fig. 1, can store various types of information such as system information of the computer, definitions of a job, definition of operation schedule of a job, job operation history or calendar information. This information is stored in databases 113, 123 and 133 as described on page 6, lines 12-18 of the specification, in an object oriented basis.

Furthermore, as discussed on page 8, lines 2-13 and in Fig. 3 of the specification, each directory database 112 of computers 111, 121, and 131 holds address information of databases 112, 123 and 133 on an object oriented basis. Moreover, directory database 112 includes the directory of each global object name, given to the respective objects stored

in the databases, such that each global object name is unique in all of the databases. The directory database stores, as the information of the directory of each of the global object names, an identifier of a computer including a database in which an object having the corresponding global object name is stored, and a local object name which is a unique identifier given to identify the object on the database in which the object is stored.

The cited prior art, namely Hayashi, discloses a derived data base processing system enabling one program to access a plurality of data bases. In this capacity the Hayashi system, as disclosed on column 6, line 62 to column 7 line 8, discloses;

“For example, suppose a database 17A comprises a tables TA1, TA2, and TA3 and a database 17B comprises tables TB1, TB2, and TB3.

When an application program accesses these tables TA1, TB1, and TB2 simultaneously in these databases, the definition of the derived database (C) 18 for designating a database 17A, database 17B, and their tables TA1, TB1, and TB2 is registered through a derived database registering unit 11. In this definition, a name in a table, etc. used for the derived database 18 is assigned a name which is different from its original name. Thus, even though a name in a table, etc. in the database 17A and a name in a table, etc. in the database 17B are duplicates, the conflict of same names can be avoided by assigning an alias to one name.”

As illustrated above, the system disclosed in Hayashi, suffers from the same drawback associated discussed in the background of the present invention. In order to retrieve the desired object it is first necessary to access all databases storing a table that includes the requested record. Such a step is not necessary in the present invention because a desired object or record can be retrieved, by accessing only the database that actually stores the desired object or record. In particular, the present invention maintains a directory database that is capable of directly accessing a desired object stored among a plurality of databases without the need to first review the contents of each of the networked databases.

As such, there is no teaching or suggestion in Hayashi that discloses the present invention as claimed. For example, there is no teaching or suggestion in Hayashi that discloses a directory database which stores, as to each of the object stored in the plurality of database systems, corresponding information including with directory information and a database system in which the object concerned is stored.

Likewise, there is no teaching or suggestion in Hayashi that discloses a directory control unit which acquires, by using the directory database, directory information corresponding to target object of the accepted access request.

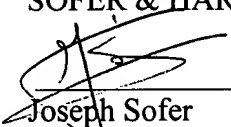
As such, Applicants request that the rejection to the claims 1-15 be withdrawn and respectfully submit that the present invention as claimed is now in condition for allowance, the earliest possible notice of which is earnestly solicited. If the Examiner feels that a telephone interview would advance the prosecution of this application they are invited to contact the undersigned at the number listed below.

Respectfully submitted

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Dated: 1/28/03

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